those assumptions may not prove accurate. In that event, it may be appropriate to calculate forward-looking support on a different geographic scale.⁴⁶

Based upon these considerations, the FCC may want to reexamine this model after it has been in place approximately four years. It may be appropriate to make major changes to the model at that time or even to develop an entirely new model.

V. Benefits

If implemented, the proposed plan would achieve several benefits.

1. Benefit to state jurisdictions maximized.

Under the May 8 order, high cost support would be used to reduce interstate access charges. Therefore, the immediate beneficiaries of the FCC's program would be interstate service providers who might then choose to pass these cost reductions along in the form of rate reductions. If rates were reduced, benefits would not necessarily flow to the states from which the contributions came, but, under the Telecom Act, 47 would produce nationwide toll rate decreases.

Under this alternative plan, while the benefits vary from one state to another, all of the money produced would be used by state commissions to reduce intrastate rates. This is consistent with the purpose of the present high cost funding program and with the Act's requirement to achieve "reasonably comparable rates."

2. Cost minimized.

The total cost at Step 5 of the Proposal, using the Blended Cost Model, is estimated at \$1.57 billion. This is an increase from the current total support (high cost and DEM weighting) of slightly less than \$1 billion.

This proposal will actually impose a smaller financial burden on interstate revenues than the FCC's current plan. It is estimated that the cost of implementing the FCC's plan for high cost funding alone (as per the May 8 order) would be \$1.96 billion, again assuming the Blended Cost Model.

This plan also requires considerably less support than that calculated by the leading forward-looking cost models. Those models calculate support on a wire-center-by-wire-center

Alternatively, competitive LECs may be able to identify low-cost and high profit customers within a wire center and avoid serving other higher cost or lower volume customers. In that event, even more geographically precise measurements of cost may be necessary.

⁴⁷ 47 U.S.C. §254(g).

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basis (or smaller). The size of the fund is determined by adding together the difference between the cost of providing service in each wire center and a national benchmark of \$31 for residential lines and \$51 for business lines. The Blended Cost Model predicts a national fund of \$7.8 billion if all costs must be paid by federal high cost support.⁴⁸

3. Intrastate revenues unaffected.

This proposal would be financed by a surcharge on the interstate revenues of interstate carriers. Intrastate revenues would not be affected.

4. Sufficiency.

Assuming that the national average cost is "reasonably comparable" to urban costs, this proposal, in conjunction with state-raised funds, would be sufficient to ensure that all rural areas have intrastate rates no higher than those "reasonably comparable" to urban areas.

5. Benefits flow to all rural areas.

This plan treats all rural customers equally and thereby contributes to competitive neutrality. The size of a carrier (e.g., more than 50,000 lines or more than 200,000 lines) is not considered in the calculation. By contrast, the FCC's plan differentiates between rural customers served by "rural carriers" and rural customers served by "non-rural carriers."

6. State jurisdiction protected.

There would be no requirement that states take any particular action in setting intrastate rates. States would, however, be jointly responsible with the FCC for ensuring that the universal service mandates of the Telecom Act are fulfilled.

7. State discretion.

State commissions would need to develop a mechanism to distribute high cost support. While this is an added burden on states, it is one that would likely fall on states in any case if the existing FCC order were implemented. Several states already have high cost support mechanisms in place.

The difference between the amount of support provided in this proposal and that provided on a wire center model is approximately equal to the amount of the existing implicit subsidies in a study area. Under the plan proposed here, states would be responsible for funding any implicit subsidies they choose to make explicit through their state universal service funds.

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States would have some discretion, within the constraints of the Telecom Act, to apply federal support where it is needed. This will allow states to replace implicit subsidies within the rate structure gradually as competition increases the need for or risk of rate deaveraging in high cost areas. It will also allow states to establish articulated policies that interrelate high cost support with other elements of competition, such as service area size. In particular, states could decide whether to reduce toll charges or dial tone charges. States could also allocate support among large companies and small companies.

8. Competitive neutrality.

Federal funds would be distributed to state commissions, and the federal distribution would therefore be competitively neutral. In distributing these funds, state commissions would also demonstrate, based on their plans approved by the FCC, that they would not establish a preference for a particular kind of carrier or technology.

9. Cost-based.

Support would be distributed based upon costs, both forward-looking and embedded.

10. Litigation risk minimized.

This proposal could eliminate the uncertainty arising from pending litigation in the Fifth Circuit of the United States Court of Appeals. In that court, at least one low-average-cost state is seeking to determine whether the FCC has authority to levy charges on the intrastate revenues of interstate carriers. In addition, at least one high-average-cost state is seeking a ruling on whether the FCC's May 8 order is sufficient to ensure that rates in rural and high cost areas will be reasonably comparable to rates in urban areas.

If the Court should rule in favor of the high-average-cost state that the FCC must provide all of the support calculated under a forward-looking cost model, the Blended Model would predict that the size of the federal fund might need to be \$7.8 billion, more than four times as large as the fund required here.

11. All states benefit.

As compared to the FCC plan, which would raise \$2 billion but provide no support to the intrastate jurisdiction, this plan benefits every state.⁴⁹ In several cases, the alternative plan

The FCC's plan would also be likely to produce benefits to customers in all states in the form of national reductions in interstate toll rates. While this could be a substantial benefit to (continued...)

would not increase support to a particular state; but the citizens in that state would make a smaller contribution to the federal fund than under the FCC plan.

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^{(...}continued)

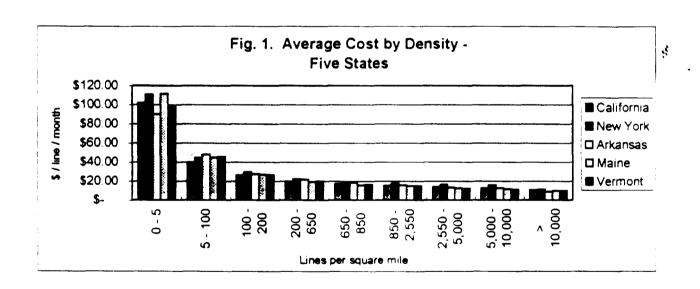
telephone customers in each state, the magnitude of such reductions is unknown.

This analysis assumes that the FCC plan would not give any support to the intrastate jurisdiction. The FCC's intentions on this question are not entirely clear, and several states have requested clarification on this point.

Appendix A - The Distribution of Costs

Two forward-looking cost models are under consideration by the FCC, the Hatfield model and the BCPM model. Each performs detailed cost analyses in small geographic areas. Each model then sorts these geographic areas into zones based upon the density of telephone lines per square mile. While it is not possible to blend the analyses of the two models, either model can be used to examine how density affects cost. The results clearly indicate that it is more expensive to provide telecommunications services in rural states than in more densely populated states.

Figure 1 shows, for five states, how forward-looking costs vary in the nine density zones used by the Hatfield model.⁵²



As Figure 1 illustrates, the Hatfield model predicts some cost variations from state to state, but comparatively larger variations from one density zone to another. For the most rural

As mentioned above, the Blended Cost Model was prepared because no cost model has yet been adopted by the FCC. The Blended Cost Model, however, is merely an averaging of state-by-state results of the two leading models, BCPM and Hatfield. The density zone analysis within the two models cannot be averaged, however, because they do not agree on the number of density zones and because they do not agree on the upper and lower bounds of the density zones.

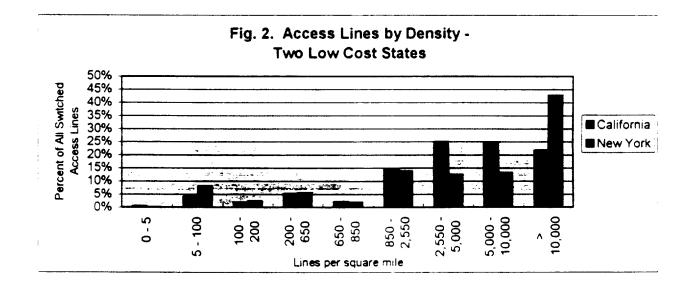
Seven zones are used in the BCPM analysis. While the precise numbers may vary, substituting the BCPM model for the Hatfield model produces similar results.

density zone (0 to 5 lines per square mile), costs are typically in the range of \$100 per line per month. In the second density zone (5 to 100 lines per square mile), costs are in the range of \$40 to \$45 per line per month. Conversely, in the three density zones where density exceeds 2,550 lines per square mile, costs average \$12.77 per month.

There is little uniformity from state to state, however, with regard to demographics. Figures 2 and 3 show the percentage of access lines found within each density zone for the same five states represented in Figure 1.

The two more urban states, California and New York, are represented in Figure 2. In California, 72 percent of the state's access lines are located in the three highest density zones. The Hatfield study reports the average weighted cost in these three zones in California to be \$12.19 per line per month. In New York, 68 percent of the access lines are found in those same three densely populated zones with an average cost of \$12.89 per line per month.

The combination of few high-cost lines and many low-cost lines within an urban state inevitably produces a low statewide average cost. Average costs predicted by the Hatfield



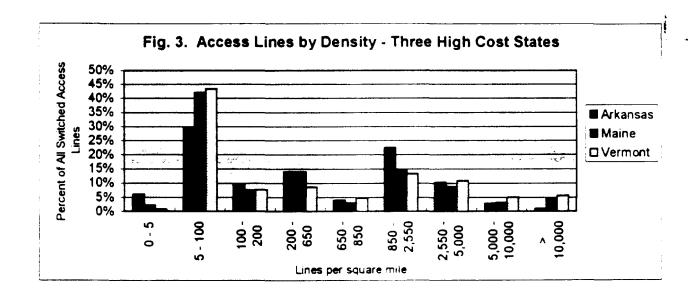
model are \$15.01 in California and \$17.21 in New York. These states have lower statewide average costs than the national average cost of \$20.52.

The Hatfield Model data used here was derived from the model author's run using standard design parameters. The five states shown are representative of urban and rural states. Nevertheless, costs in some states were higher or lower than the amounts shown here, particularly in the lowest density zone, from 0 to 5 lines per square mile.

In rural states, settlement patterns are quite different. Figure 3 shows the corresponding data for Arkansas, Maine, and Vermont, three states that are more rural than either California or New York. The graph indicates that a greater percentage of access lines in these rural states are found in the lower density zones on the left side of the graph. Indeed, a significant portion of telephone customers in these states live in the second density zone (where density is between 5 to 100 lines per square mile). The characteristic cost within this density zone is approximately \$45 per line per month.⁵⁴

Figure 3 also shows that each of these three rural states has only a small proportion of its access lines located in the three highest density zones. Therefore these states have relatively few low-cost lines.

A state with a high percentage of its access lines in high cost areas generally will have a



high average cost. Average costs predicted by the Hatfield model are \$31.43 in Arkansas, \$30.42 in Maine, and \$29.45 in Vermont. The statewide average in all three states is about \$10 higher than the national average cost.

Since a high proportion of access lines in these rural states are in low-density and high-cost areas, these states may also have a higher proportion of customers at risk from any rate

Each of the three states also shows increased population in the fifth density zone. This presumably results from the effects of small cities, like Little Rock, Portland, and Burlington. The cost characteristic of this density zone is about \$15 per month.

deaveraging that might follow local exchange competition. While density is not the only determinant of high cost, this analysis demonstrates that some rural states have a high proportion of their access lines in high cost areas. These areas would be particularly vulnerable to rate increases, and the ensuing loss of customer penetration, if funding for high cost support is insufficient.

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Appendix B - Sources of Embedded Cost Data

Embedded data were derived from the following sources.

(a) Loop Cost.

This was set equal to the 1996 unseparated NTS revenue requirement⁵⁵ of all carriers, as reported to the FCC and as further reported in the 1997 Monitoring Report prepared by the Docket 80-286 Joint Board staff.

(b) Switching Cost.

- (i) For Cost Companies Data were extracted from the same NECA filing that was used for the loop studies. Contained in this data is Account 2210, Central Office Equipment (COE) Switching Investment which was used to determine Cat 2 (Tandem) and Cat 3 (Local Switching) by cost company study area. Using ARMIS 4304 data, GSF factors were calculated to supplement the COE data. Generic "small company" factors were developed using the average of all Tier 1 LECs excluding the RBOCs. Individual factors were developed at the study area level for the Tier 1 LECs. The revenue requirements were divided by USF \$\frac{1}{2}\$ loops to obtain a Switching Revenue Requirements/Loop, by study area.
- (ii) For Average Schedule Companies The data of weighted DEM support amounts by study area was obtained from a filing with USAC. This data was generated by multiplying the COE revenue requirements by a set of factors based upon line size and minutes of use per line. The factors used are a part of the USAC filing, so by reversing the process, the COE revenue requirements were obtained. Using the "small company" GSF factors developed above, the GSF amounts were added to the direct cost. The revenue requirements were divided by USF loops to obtain a Switching Revenue Requirement/Loop, by study area.

(c) Trunking Cost.

Total Cable & Wire (C&W) Investments and expenses and Total COE Transmission Investments and expenses by cost company were extracted from the NECA data. Using ARMIS data, a factor was developed for message trunk investment to total investment for both COE - Transmission and C&W. This factor approximates the effect of the removal of loop investment (both message and private line), and private line trunk investment. The ratio is unique for each Tier 1 study area. Study area trunking revenue requirements were then developed. The revenue requirements were divided by USF loops to obtain a Trunking Revenue Requirement/Loop, by study area.

^{55 47} CFR Part 36 § 36.621

High Cost Modeling Project Federal Support to intrastate Jurisdiction Block Grant to State - Part 1 - Support Calculation

Step 1. Calculate 75% of excess forward looking cost above stated threshold.

Step 2: Calculate 75% of excess embedded cost above stated threshold.

Step 3: Calculate the lesser of results 1 and 2.

Step 4: Calculate 1997 USF payments times stated protection level

Step 5: Federal support equals greater of results 3 and 4.

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	Federal Support to Intrastate Jurisdiction											
	Step 1:		Step 2:		Step 3:		Step 4:	Step 5:		Result:		
	Calculate	Forward-	Calculate i	Embedded	Less	er of	Hold Ha	rmiess	Great	er of	Support for State	
	Looking		Cost S		Steps 1				Steps			
	Threshold= 100%		Threshold= 105%		эсера	4114	Protection La	ivel =	Sieps	Determined		
	or = \$ 28.1		or =	\$ 35.58	!			100%		Annual	by which	
	per mo.	Annual Total	per line per mo.	Annuai Total	per line per mo.	Annual Total	per line per mo.	Annual Total	per line per mo.	Total	Formula?	
	(\$/1/mo)	(\$ millions)	(\$ / I / mo)	(\$ millions)	(\$ / I / mo)	(\$ millions)	(\$ / I / mo)	(\$ millions)	(\$/1/mo)	(\$ millions)		
jabama	\$ 6.98	\$ 188	\$ 0.49	\$ 13	\$ 0.49	\$ 13	\$ 1.11	\$ 30	\$ 1.11	\$ 30	Hold-Harmless	
rizona	\$ 0.56	\$ 16	\$ 0.79	\$ 23	\$ 0.56	\$ 16	\$ 0.71	\$ 21	\$ 0.71	\$ 21	Hold-Harmless	
rkansas	\$ 10.59	\$ 161	\$ 6.29	\$ 96	\$ 6.29	\$ 96	\$ 3.26	\$ 50	\$ 6.29	\$ 96	Embedded	
alifomia	\$ -	\$.	\$ -	s .	\$ -	S .	\$ 0.16	\$ 38	\$ 0.16	\$ 38	Hold-Harmless	
olorado	\$ 1.16	\$ 33	\$ 3.29	\$ 94	\$ 116	\$ 33	\$ 0.91	\$ 26	\$ 1.16	\$ 33	Forward-Lookan	
onnecticut	\$ -	\$ -	\$ 0.63	\$ 15	\$ -	\$.	\$.	\$.	S -	\$.	1	
elawere	\$.	\$.	\$.	\$ -	\$.	\$.	\$.	\$.	\$ -	\$.	<u> </u>	
istrict of Columbia	S -	Š	\$.	S -	\$.	\$ -	s -	š .	s -	\$		
lorida	\$		\$ -	\$	\$	\$	\$ 0.25	\$ 28	\$ 0.25	\$ 28	Hold-Harmless	
eorgia	\$ 2.27	\$ 116	\$ 2.77	\$ 141	\$ 2.27	\$ 116	\$ 0.23	\$ 41	\$ 2.27			
eweii	\$.	\$ -	\$ 4.03	\$ 33	\$ 2.21_	\$.	\$.	\$.			Forward-Looking	
	\$ 9.92	\$ 75	\$ 3.54	\$ 27	-		\$ 3.12	*	\$.	\$.		
laho inois	\$ 9.92	, (3				\$ 27	1	\$ 24	\$ 3.54	\$ 27	Embedded	
		•	\$	\$ -	\$	\$		\$ 7	\$ 0.08	\$ 7	Hold-Harmless	
diana	\$ 1.54	\$ 60	\$ -	\$.	\$	\$.	\$ 0.14	\$ 5	\$ 0.14	\$ 5	Hold-Harmless	
<u>we</u>	\$ 7.50	\$ 138	\$.	\$.	<u> </u>	\$.	\$ 0.21	5 4	\$ 0.21	\$ 4	Hold-Harmiess	
ansas		\$ 121	\$ 3,31	\$ 58	\$ 3.31	\$ 58	\$ 2.34	\$ 41	\$ 3.31	\$ 58	Embedded	
entucky		\$ 171	\$ 3.04	\$ 71	\$ 3.04	\$ 71	\$ 0.53	\$ 12	\$ 3.04	\$ 71	Embedded *	
ouisiana	\$ 2.36	\$ 65	\$ 3.12	\$ 86	\$ 2.36	\$ 65	\$ 1.67	\$ 46	\$ 2.36	\$ 65	Forward-Looking	
aine	\$ 8.18	\$ 74	\$ 5.42	\$ 49	\$ 5 42	\$ 49	\$ 106	\$ 10	\$ 5.42	\$ 49	Embedded	
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innesota	\$ 3.28	\$ 107	\$ -	\$ -	\$.	\$ -	\$ 0.35	\$ 12	\$ 0.35	\$ 12	Hold-Harmless	
ississippi	\$ 10.26	\$ 153	\$ 7.00	\$ 105	\$ 7.00	\$ 105	\$ 119	\$ 18	\$ 7.00	\$ 105	Embedded	
issouri	\$ 3.37	\$ 123	\$ 0.65	\$ 24	\$ 0.65	\$ 24	\$ 0.93	\$ 34	\$ 0.93	\$ 34	Hold-Harmless	
ontana	\$ 19.25	\$ 111	\$ 7.89	\$ 45	\$ 789	\$ 45	\$ 421	\$ 24	\$ 7.89	\$ 45	Embedded	
ebraska	\$ 8.98	\$ 103	\$ 3.03	\$ 35	\$ 3.03	\$ 35	\$ 103	\$ 12	\$ 3.03	\$ 35	Embedded	
evada	\$.	\$	\$	\$ -	\$.	s	\$ 0.53	\$ 7	\$ 0.53	\$ 7	Hold-Harmless	
ew Hampshire	\$ 2.62	\$ 23	\$ 3.25	\$ 29	\$ 2.62	\$ 23	\$ 0.95	\$ 9	\$ 2.62	\$ 23	Forward-Looking	
ew Jersey	\$	•	\$.		\$ 2.02	\$.	\$ 0.02	S 1	\$ 0.02	\$ 1	Hold-Harmless	
ew Mexico	\$ 8.57	\$ 86	\$ 5.12	\$ 52	\$ 5.12	\$ 52	\$ 2.50	\$ 26	\$ 5.12	\$ 52	Embedded	
ew York		3 30							1			
	\$ -		\$ 1.49	\$ 214	\$.	\$ -	\$ 0.15	\$ 22	\$ 0.15	\$ 22	Hold-Harmless	
orth Carolina	\$ 3.47	\$ 176	\$ 1.39	\$ 70	\$ 1.39	\$ 70	\$ 0.47	\$ 24	\$ 1.39	\$ 70	Embedded	
orth Dakota	\$ 18.34	\$ 91	\$ 2.42	\$ 12	\$ 2.42	\$ 12	\$ 1.83	\$ 9	\$ 2.42	\$ 12	Embedded	
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klahoma	\$ 6.52	\$ 140	\$ 1.96	\$ 43	\$ 1.98	\$ 43	\$ 1.68	\$ 36	\$ 1.98	\$ 43	Embedded	
regon	\$ 3.52	\$ 78	\$ 1.54	\$ 34	\$ 1.54	\$ 34	\$ 0.93	\$ 21	\$ 1.54	\$ 34	Embedded	
ennsylvania	\$ -	\$ -	s -	\$ -	\$ -	\$ -	\$ 0.04	\$ 4	\$ 0.04	\$ 4	Hold-Harmless	
hode island	\$ -	\$ -	\$ -	\$ -	\$.	S -	\$ -	\$.	\$.	\$ -	i	
outh Carolina	\$ 4.62	\$ 109	\$ 4.33	\$ 102	\$ 4.33	\$ 102	\$ 1.35	\$ 32	\$ 4.33	\$ 102	Embedded	
outh Dekota	\$ 18.59	\$ 93	\$ 2.94	\$ 15	\$ 294	\$ 15	\$ 124	\$ 6	\$ 2.94	\$ 15	Embedded	
ennessee	\$ 3.64	\$ 134	\$ -	\$ -	\$.	\$	\$ 0.21	\$ 8	\$ 0.21	\$ 8	Hold-Harmless	
ex28	\$ 0.29	\$ 37	\$ 1.06	\$ 136	\$ 0.29	\$ 37	\$ 0.71	\$ 90	\$ 0.71	\$ 90	Hold-Harmless	
tah	\$ 1.25	\$ 15	\$ -	\$.	\$.	S -	\$ 0.45	\$ 5	\$ 0.45	\$ 5	Hold-Harmless	
ermont	\$ 7.89	\$ 35	\$ 9.53	\$ 43	\$ 7.89	\$ 35	1	5 8	\$ 7.89	\$ 35		
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/isconsin	1		g 5.09	• 30	. 5.09	\$ 56	1	-	\$ 0.56		Hold-Harmless	
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otal:	<u> </u>	\$ 3,123	<u> </u>	\$ 1,780		\$ 1,265	!	\$ 899	<u> </u>	\$ 1,570	1	
eximum Value	\$ 19.41		\$ 10.23		\$ 10.23		\$ 4.21		\$ 10.23			

Number of states under:	
- Forward-Looking Cost	5
- Embedded Cost	17
- Hold-Harmless	22
- No Support	6

High Cost Modeling Project Federal Support to intrestate Jurisdiction Block Grant to State - Part 2 - Winners and Losers

01/10/98

Federal USF Surcharge Rate:

This Plan = 2.40% FCC Plan = 3.01%

This Plan Compared to No Federal Program This Plan Compared to FCC's May 8 Plan Net Gain (Loss) Fed'i Support to Intra. Juris. Payment into Federal Fund Payment Retail This Support Into FCC FCC Gain or Gain or (or Loss) This Annual Revenue Federal per line Angual Plan Plan Loss Plan Plan Loss per line Total **Fund** per mo Total Total Total Total Total Amount per mo. (\$ milli) (\$ / I / mo) (\$ mill) (\$ mill) (\$/1/mo) (\$ mill) \$868 \$2 **SO** 33 \$30 \$0 230 \$26 \$35 \$1.30 Alahama 230 \$9 \$21 \$7 \$21 \$1 232 \$30 (SO 31) (\$9) \$21 **S**0 \$21 \$30 \$37 \$28 \$0.97 Anzona \$96 \$525 \$13 \$5.46 \$83 \$96 \$0 \$96 \$13 \$16 **5**3 \$99 \$6 49 Arkaneae \$38 **S**6 322 \$152 (\$0.47)(\$114)\$38 \$0 \$38 \$152 \$190 \$38 \$76 \$0.31 California \$1,236 \$1,082 SO 12 \$3 (\$26) \$33 \$33 \$37 \$7 \$1 42 \$0 27 233 Colorado Connecticut \$30 \$26 (\$1 06) \$0 \$0 \$33 \$7 \$7 \$0 \$0 \$26 \$0 \$0 \$0 \$7 \$1 \$1 \$0.24 50 \$237 \$6 (\$0.96) (\$6) \$6 Delaware \$0 SO \$0.20 District of Columbia 50 \$372 \$9 (\$0.81) (\$9) 50 \$9 **S**11 **5**2 SO \$25 \$0 47 \$28 \$4 099 \$99 (\$0 62) (\$70)\$28 \$28 \$99 \$123 \$53 Fionda \$2 52 \$6 20 \$116 \$2.085 \$50 \$66 \$116 \$0 \$116 \$50 \$63 \$129 Georgia \$1 29 (\$0.78) \$0 \$269 \$6 (\$6) 50 **S**O 50 **5**2 52 Hawai Idaho \$27 \$321 \$8 \$2.53 \$19 \$27 **S**O \$27 \$8 \$10 \$2 \$29 \$3.30 \$2,701 \$65 (\$0 64) (\$58) \$7 \$0 \$7 \$65 \$81 \$16 \$23 \$0.26 Hinos \$7 (\$0.59) \$1,177 **5**28 (\$23) \$5 **S**O \$5 \$28 \$35 \$7 \$12 **SO** 32 Indiana \$5 \$629 (\$0.62) 58 90 41 \$4 \$15 (\$11) 90 \$19 OWN \$3.52 \$3.27 \$2.45 \$4 \$58 \$15 \$58 \$0 \$58 \$15 \$62 \$629 \$43 Kansas \$19 20 \$50 \$71 \$5 Kentucky 571 \$892 \$21 \$2.12 \$71 \$21 \$27 \$76 OUISIANA \$65 **SA71** \$21 \$1.60 \$44 \$65 SO \$65 \$21 \$26 25 \$70 \$2.55 \$42 \$49 20 \$51 \$49 \$302 \$7 \$4.62 \$49 \$7 29 \$2 Maine \$5 52 \$0 \$0 \$0 22 Maryland 20 \$1 414 \$34 (\$0.86) (\$34)\$0 \$34 <u>\$43</u> 60 29 90 \$54 \$0 27 Massachusetts 8 \$1.804 543 (\$0.87) (\$43) 50 \$0 \$43 **\$**11 511 \$43 \$0 \$20 \$43 \$53 Michigan \$20 \$1.776 (\$0.32) (\$23)\$20 **\$11** \$31 \$0.44 \$1,075 Minnesota \$12 \$26 (\$0.44)(\$14)\$12 \$0 \$12 \$26 \$32 \$6 \$18 \$0.55 Mississippi \$105 \$529 \$13 \$6 15 \$92 \$105 20 \$105 \$13 \$15 \$3 \$108 \$7.21 Missouri \$34 \$0 14 \$34 50 \$34 **5**29 \$7 \$1 13 \$1,207 529 \$45 Montana \$239 \$6 89 \$40 \$45 SO \$45 \$1 \$47 \$8 14 Nebrasira 235 \$400 \$10 \$2.19 \$25 535 20 \$35 \$10 \$12 **\$**2 \$37 \$3 24 | Neveda 37 \$1,710 541 (\$2.76)(\$34)\$7 \$0 \$7 \$41 \$51 \$10 \$17 \$1"36 New Hamoshire \$23 \$421 \$10 \$1 49 \$13 \$23 90 \$23 \$10 \$13 23 \$26 \$2 90 New Jersey \$1 \$2,844 \$68 (\$0.97) (\$67) \$1 \$0 \$1 \$68 \$86 \$17 \$18 **SO** 27 New Mexico \$52 \$448 \$11 \$4.05 \$41 \$52 \$0 \$52 \$11 \$13 S \$54 \$5.38 New York \$22 \$4,964 \$119 (\$0.68) (\$97) \$22 **S**0 \$22 \$110 \$149 \$30 \$52 \$0.36 North Carolina \$70 \$1,781 \$43 \$0.54 \$27 \$70 **S**0 \$70 \$43 \$54 \$11 \$81 \$1.50 North Dakota \$12 \$177 \$4 \$1.56 \$8 \$12 **S**0 \$12 \$4 \$5 \$1 \$13 \$2 54 \$2,391 \$58 (\$0.69) (\$53) 50 \$5 \$58 **SO** 25 Ohio \$5 \$5 \$2 18 \$1 77 Oklahoma \$43 \$43 \$22 \$4 \$25 \$43 \$17 \$47 \$34 \$820 **\$**0 65 \$34 \$0 \$34 \$5 \$39 Oregon \$20 \$15 \$20 \$25 \$4 54 \$0 \$4 \$68 \$85 \$17 \$21 **\$**0 23 Pennsylvania \$2,831 \$68 (\$0.71)(\$64)Rhode Island 50 \$289 \$7 (\$0.95) (\$7) 50 \$0 50 \$7 22 **\$**2 52 \$0.24 South Carolina \$102 \$3 42 \$102 \$27 \$5 \$107 \$4 56 \$893 \$21 \$5 082 \$102 \$21 \$0 \$0 South Dakota \$15 \$15 \$5 \$1 \$192 \$2.01 \$10 \$15 \$6 \$16 \$3 17 \$0 **S8** \$38 **S8** \$0.41 Tennessee \$8 (\$0.61) \$4 \$30 \$15 \$1.257 230 (\$23) 50 \$0.89 290 092 \$90 \$113 \$23 Texas \$3 743 022 20 00 \$0 \$90 \$113 \$5 \$3 \$5 \$457 (\$0.48) \$5 \$0 \$11 \$14 \$8 90 69 utab \$11 (58) \$35 \$190 \$0 235 \$5 \$45 \$6 \$1 \$37 \$8 15 Vermont 25 **\$6 82** \$31 535 S1 871 \$0 55 \$56 \$17 90 34 Virginia \$5 \$45 (SO AO) (\$40) \$5 \$11 Washington \$34 \$34 \$43 \$36 **\$**0 93 \$28 (\$6) \$0 \$28 29 \$1.416 (\$0.15) \$28 59 \$2 \$58 \$5 30 5384 \$12 West Virginia \$56 200 \$4.25 547 \$56 80 \$56 \$25 \$0.73 Wisconsin \$1 041 50 \$21 231 \$6 \$27 \$21 \$25 (\$0.11)(\$4) 521 \$159 94 \$1 \$10.53 \$30 55 534 Wyoming 233 \$9.07 233 20 233

Total \$1,570 \$65,305 \$1,570 \$0 \$1,570 \$1,570 \$1,964 \$394 \$1,964 \$1,570 80 Maximum Value \$9 07 Minimum Value (\$2.76)

\$10.53

\$0.20

High Cost Modeling Project Federal Support to Intrastate Jurisdiction Block Grant to State - Part 3 - Data Listing

1/10/98 17 02

}	Forward-Looking Costs Blended Cost Model			Emi	pedded Cos	B		Hold - H	Revenu	Bases			
as and					4		DEM		Н	old-	Retail	Retail	
ļ	Access	Annual	per line	Access	Average Cost Annual per line		Weighting	Projected USF	Harmiess * Annual per line		Revenue	Revenue	
	Lines	(millions)	(\$ / I / mo)	Lines	(millions)	per month (\$71/mo)	(millions)	1997 (millions)	Amount (millions)	(\$ / I / mo)	(millions)	(millions)	
Aiabama	2 249 542	\$ 1011	\$ 37.43	2 37 1 617	\$ 1.031	\$ 36.23	\$ 3.3	\$ 26.5	\$ 30	\$ 1.05	888 2	\$ 1500	
Anzona	2,415,476	\$ 837	\$ 28 87	2.620 101	\$ 1.152	\$ 36.53	\$ 43	\$ 163	\$ 21	's 366	s 1 232	\$ 1 225	
Arkansas	1 270 190	\$ 644	\$ 42 25	1.357.264	-	\$ 43.96	\$ 52	\$ 44.5	s 50	. \$ 3.05	\$ 526	\$ 803	
California	20 199 351	\$ 5.318	\$ 21 94	21,707,375	\$ 7.528	\$ 28.90	\$ 44	\$ 33.7	\$ 38	\$ 0.15	S 6 322	\$ 13 488	
Colorado	2,380,232	\$ 848	\$ 29 67	2,548,940	\$ 1,223	\$ 39.97	\$ 32	\$ 22.7	s 26	\$ 0.85	\$ 1236	\$ 1465	
Connecticut	2,041 315	\$ 527	\$ 25 60	2.107.345	\$ 921	\$ 36 42	\$.	\$.	\$	\$	\$.082	\$ 1406	
Delawere	497.697	\$ 150	\$ 25.08	542,120	\$ 171	\$ 25.30	\$	s .	\$	S .	S 237	\$ '58	
District of Columbia	913.735	\$ 179	\$ 16.36	972,665	\$ 229	\$ 19.56	\$	\$.	S	s -	\$ 372	\$ 409	
Flonda	9,490,147	\$ 2,820	\$ 24 77	10,304,031	\$ 4 329	: \$ 35.01	S 26	\$ 258	\$ 28	\$ 0.23	\$ 4099	\$ 5860	
Georgia	4 251 471	\$ 1590	\$ 31 16	4,691,137	\$ 2211	\$ 39.28	\$ 58	\$ 344	\$ 41	\$ 0.73	S 2 085	\$ 2884	
Hawen	690,702	\$ 205	\$ 2469	776,571	\$ 382	\$ 40.95	\$	\$	\$.	\$ -	\$ 269	\$ 424	
idaho	633,471	\$ 314	\$ 41 35	668.899	\$ 324	\$ 40 31	\$ 38	\$ 199	\$ 24	\$ 296	\$ 321	\$ 329	
llinois	7.556,209	\$ 2,236	\$ 24 66	8,053,516	\$ 2,730	\$ 28.25	\$ 27	\$ 42	\$ 7	S 0 07	\$ 2.701	\$ 4 408	
ndiana	3,242,405	\$ 1,174	\$ 30.18	3,457,575	\$ 1,324	\$ 31.91	\$ 29	\$ 24	\$ 5	\$ 013	\$ 1,177	\$ 2070	
OWE	1,528,944	\$ 699	\$ 38.12	1,605,947	\$ 662	\$ 34.38	S 11	\$ 27	\$ 4	\$ 0.20	\$ 529	\$ 908	
Kansas	1,466,538	\$ 656	\$ 37 28	1,573,136	\$ 755	\$ 39.99	\$ 79	\$ 33.2	\$ 41	\$ 218	\$ 529	\$ 904	
Kentucky	1,947,323	\$ 885	\$ 37 87	2,049,601	\$ 975	\$ 39 63	\$ 04	\$ 119	\$ 12	\$ 0.50	\$ 892	\$ 1381	
Louisians	2,288,139	\$ 859	\$ 31 27	2,407,909	\$ 1,148	\$ 39.75	\$ 49	\$ 410	\$ 46	\$ 159	\$ 871	\$ 1.552	
Maine	755,744	\$ 354	\$ 39.03	806,442	\$ 414	\$ 42.81	\$ 33	\$ 62	\$ 10	\$ 0.99	\$ 302	\$ 439	
Maryland	3,292,070	\$ 947	\$ 23 97	3,528,611	\$ 1,252	\$ 29.57	S .	\$	\$ -	\$	\$ 1,414	\$ 1942	
Massachusetts	4.148,326	\$ 1,134	\$ 22.78	4,528,072	\$ 1.780	\$ 32.75	S	\$ 00	\$ 0	\$ 000	\$ 1,804	\$ 2,594	
Michigan	5.860,939	\$ 1,963	\$ 27 90	6,260,158	\$ 2.263	\$ 30 12	·\$ 61	\$ 138	S 20	\$ 0.27	\$ 1,776	\$ 3,949	
Minnesota	2,720,511	\$ 1,061	\$ 32.50	2.889,066	\$ 1134	S 32 71	\$ 47	\$ 68	\$ 12	\$ 033	\$ 1,075	\$ 1,557	
Mississippi	1.245.532	\$ 625	\$ 41.81	1.307.345	\$ 705	\$ 44 92	\$ 19	\$ 159	\$ 18	\$ 114	\$ 529	872	
Missouri	3.052,815	\$ 1.195	\$ 32.61	3.316.033	\$ 1 450	\$ 36 44	\$ 47	\$ 295	\$ 34	\$ 086	\$ 1.207	\$ L869	
Montana	480,433	\$ 310	\$ 53.79	507 239	\$ 281	\$ 46 10	\$ 58	\$ 184	\$ 24	\$ 398	\$ 239	\$ 304	
Nebrasica	953,532	\$ 459	\$ 40.10	1 006 663	\$ 480	\$ 39.53	\$ 55	\$ 62	S 12	\$ 0.97	\$ 400	\$ 688	
Nevada	1.040.173	\$ 344	\$ 27 53	1.172.275	\$ 389	\$ 27.58	\$ 43	\$ 24	\$ 7	\$ 0.47	\$ 1710	\$ 1113	
New Hampshire	744,121	\$ 282	\$ 31 62	802,056	\$ 384	\$ 39.91	\$ 37	\$ 48	\$ 9	\$ 088	\$ 421	\$ 419	
New Jersey	5,785,830	\$ 1.452	\$ 20 92	6 269 389	\$ 2.075	\$ 27.58	\$ 0.5	\$ 07	\$ 1	\$ 0.02	\$ 2844	\$ 3345	
New Mexico	840 662	\$ 399	\$ 39.56	889 682	\$ 453	\$ 42.40	\$ 52	s 20 0	\$ 26	\$ 245	\$ 448	\$ 5.3	
New York	11 965,732	\$ 3.279	\$ 22.80	12.597.063	\$ 5679	S 37 57	\$ 11.4	S 108	\$ 22	S 015	\$ 4964	\$ 8 298	
North Carolina	4 220 030	\$ 1,659	\$ 32.75	4,619,559		\$ 37.43	\$ 17	\$ 21.9	\$ 24	\$ 043	\$ 1781	\$ 2 932	
North Dekota	411 747	\$ 260	\$ 52.58	411 774	\$ 192	\$ 38.81	\$ 38	\$ 52	\$ 9	\$ 183	\$ 177	\$ 233	
Ohio	6,338,646	\$ 2,100	\$ 27 60	6,767,520	\$ 2,606	\$ 32.39	\$ 38	\$ 40	\$ 5	\$ 0.06	\$ 2,391	\$ 4791	
Oldahoma	1.794.810	\$ 793	\$ 36 82	1.929.137	\$ 885	\$ 38 22	\$ 80	\$ 281	\$ 36	\$ 1.56	\$ 725	\$ 1033	
Oregon	1 849 817	\$ 728	\$ 32.82	1,990,447	\$ 899	\$ 37.54	\$ 63	\$ 144	\$ 21	\$ 0.87	\$ 820	\$ 1.051	
Pennsylvania	7.569 252	\$ 2 401	\$ 26 43	8 069 739	\$ 2759	\$ 28.50	\$ 26	S 13	\$ 4	\$ 0.04	\$ 2.831	\$ 41.	
Rhode Island	608.876	\$ 171	\$ 23 46	660 255	\$ 261	\$ 32.95	s	s	S	\$	\$ 289	\$ 311	
South Carolina	1 961 543	\$ 807	\$ 34.29	2,108,568	\$ 1046	\$ 41.35	S 67	\$ 25.0	\$ 32	\$ 125	\$ 893	\$ 1 429	
South Dekota	415,693	\$ 264	\$ 52.92	411 249	\$ 195	\$ 39.50	\$ 3.2	\$ 30	\$ 6	\$ 125	\$ 192	\$ 221	
Tennessee	3,061,932	\$ 1,212	\$ 32.97	3.266.094	\$ 1388	\$ 35.42	\$ 24	\$ 52	\$ 8	\$ 0.20	\$ 1 257	\$ 1817	
Texas	10,635,340	\$ 3,639	\$ 28.51	11 646,036	\$ 5171	\$ 37.00	\$ 129	\$ 77.5	\$ 90	\$ 0.65	\$ 3,743	\$ 6873	
Utah	976 743	\$ 349	\$ 29.79	1.063.247	\$ 437	\$ 34.24	\$ 22	\$ 31	\$ 5	\$ 0.42	\$ 457	\$ 505	
Vermont	373,218	\$ 173	\$ 38.64	396,427	\$ 230	\$ 48 29	\$ 22	\$ 57	\$ 8	\$ 167	\$ 199	\$ 193	
Virginia	4.109.142	\$ 1,411	\$ 28 62	4,456,171	\$ 1690	\$ 31.61	\$ 09	\$ 45	S 5	\$ 010	\$ 1871	\$ 2473	
Washington	3 250 647	\$ 1090	\$ 27.94	3.479.286	\$ 1523	\$ 36.47	\$ 32	\$ 246	\$ 28	\$ 0.67	\$ 1,416	\$ 2004	
West Virginia	916,662	\$ 473	\$ 43.01	973,414	\$ 495	\$ 42 37	\$ 15	\$ 184	\$ 20	\$ 171	\$ 384	\$ 606	
Wisconsin	3 078 873	\$ 1,152	\$ 31.17	3,281,583	\$ 1178	\$ 29.92	\$ 95	\$ 113	\$ 21	\$ 0.53	\$ 1041	\$ 1 356	
Wyoming	272,670	\$ 177	\$ 54.01	284,920	\$ 168	5 49 23	\$ 25	\$ 83	S 11	\$ 319	\$ 159	\$ 152	
				20-,020						†	 	1	
^r otai	159.815.046	\$ 53,712		171,513,489	\$ 69 746		\$ 182.4	\$ 7167	\$ 8990	†	s 65 305	\$ 101 770	
Maximum Value		y -2,714	\$ 54.01	// 1,313,409	3 03/40	\$ 49.23	- O4 4	3 /10/	, 5 333 0		<u> , , , , , , , , , , , , , , , , , , ,</u>		
Minimum Value			\$ 16.36			\$ 19.56							
			9 10.30			, , ,							

^{*} Calculation uses embedded line counts, not forward-looling counts.

High Cost Modeling Project Preliminary Data Sheet - Embedded Cost Data

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	Average	Average Cost per Loop									
	Loops		.00P		Central	Trunki			Total		Total
		1	Cost		Office	Cost	_		Cost		Cost
		ì `	JU41		Cost		•	1	3030	1	3330
					· I	(-11		(annual)		
Alabasa	2,371,617		nnual)	Ļ	(annual)	(annua			(annual) 434.79		nonthly) 36.23
Alabama	1	\$	272.59 308.94	5			9.55	Ş		\$	
Arizona	2,620,101	5		Ş	111 73		3.93	\$	439.60	\$	36.63
Arkansas	1,357,264	\$	369.26	\$	119.60		3.71	\$	527.57	\$	43.96
California	21,707,375	\$	190.65	\$	108.04		3.10	\$	346.79	\$	28.90
Colorado	2,548,940	\$	316.90	<u>\$</u>	129.44		3.27	\$	479.61	\$	39 97
Connecticut	2,107,345	\$	227.49	\$	155.27		4 29	\$	437.05	\$	36.42
Delaware	542,120	\$	205.62	\$	80.83	-	9.10	\$	315.55	\$	26.30
District of Columbia	972,665	\$	65.68	\$	143.11		7.08	\$	235.88	\$	19.66
Florida	10,304,031	\$	286.87	\$	110 92	\$ 2	2.32	\$	420.10	\$	35.01
Georgia	4,691,137	S	319.96	\$	118.71	\$ 3	2.64	\$	471.31	\$	39.28
Hawaii	776,571	\$	255.89	\$	173.83	\$ 6	1.72	\$	491.44	\$	40.95
Idaho	668,899	5	338.19	5	114.50	\$ 3	1.00	\$	483.70	\$	40.31
Illinois	8.053,516	S	188.46	S	111.89		8.62	S	338.97	S	28.25
Indiana	3,457,575	S	227.46	S	122.48		2.96	S	382.90	S	31.91
lows	1,605,947	S	238.49	Š	135.75		B.28	Š	412.52	s	34.38
Kansas	1,573,136	5	305.80	Š	125.86		B. 22	Š	479.88	5	39.99
Kentucky	2,049,601	\$	310.10	Š	127.79	-	7.73	Š	475.62	s	39.63
Louisiana	2,407,909	s	319.30	Š	121 13	-	6.53	Š	476.96	Š	39.75
Maine	806,442	Š	299.41	5	142.46		1.89	Š	513.76	Š	42.81
Maryland	3,528,611	Š	213.87	Š	111.82		9.16	Š	354.85	s	29.57
Massachusetts	4,528,072	S	188.13	,	126.78		8.19	Š	393.11	5	32.76
		1 -		-				-		1 -	
Michigan	6,260,158	S	213.15	\$	97.58		0.75	Ş	361.47	\$	30.12
Minnesota	2,889,066	5	241.63	\$	127.02		3 91	\$	392.56	\$	32.71
Mississippi	1,307,345	\$	366.53	\$	131.18	-	1 28	\$	538.98	\$	44.92
Missouri	3,316,033	\$	279.08	<u>\$</u>	124.84		3.40	_\$	437.32	5	36.44
Montana	507,239	S	376.18	\$	127.09	•	9.99	\$	553.25	\$	46.10
Nebraska	1,008,883	\$	263.56	\$	170.85	-	1.11	\$	475.52	\$	39.63
Nevada	1,172,275	5	185.11	\$	115.93	\$ 3	1.07	\$	3 32 .11	\$	27.68
New Hampshire	802,056	\$	300.01	\$	123.84	\$ 5	5.08	\$	478.92	S	39.91
New Jersey	6,269,389	\$	189.48	\$	100.91	\$ 4	0.52	\$	330.91	\$	27.58
New Mexico	889,682	\$	348.19	-\$	130.89	\$ 2	9.76	\$	508.84	\$	42.40
New York	12,597,063	S	225.90	\$	145.58	s 79	9.33	\$	450.80	5	37.57
North Carolina	4,619,559	s	296.55	Š	123.12	\$ 2	9.49	S	449.16	S	37.43
North Dakota	411,774	5	289.59	Š	139.99		6.18	Š	465.76	S	38.81
Ohio	6,767,520	S	216.70	Š	121.23	-	7.12	Š	385.05	Š	32.09
Oklahoma	1,929,137	Š	294.17	Š	123.23		1 20	-\$	458.61	S	38.22
Oregon	1,990,447	s	295.32	Š	122.06		4.29	Š	451.67	S	37.64
Pennsylvania	8,069,739	S	214.94	Š	96.42		0.59	Š	341.96	Š	28.50
Rhode Island	660,255		220.05	\$			4.54	\$	395.39	\$	32.95
										1.	
South Carolina	2,108,568		337.79		129.56			<u> </u>	496.25	5	41.35
South Dakota	411,249	5	283.56				7 98	Ş	474.04	1	39.50
Tennessee	3,266,094	1 '	279.18	\$	115.32		0.50		425.00		35.42
Texas	11,646,036	\$	278.34	\$	129.11		6.57		444.02	1.	37.00
Utah	1,063,247	\$	259.74	\$	123.27		7 92	\$	410.93	\$	34.24
Vermont	396,427		352.37	5	155.78		1.28	_\$	579.43	\$	48.29
Virginia	4,456,171	\$	240.93	\$	106.38	\$ 3	1.95	\$	379.26	\$	31.61
Washington	3,479,286	\$	272.46	\$	132.00		3.13		437.59	\$	36.47
West Virginia	973,414	\$	334.81	\$	129.86	\$ 4	3.82	\$	508.49	\$	42.37
Wisconsin	3,281,583	S	217.59	\$	108.40		3.04	\$	359.03	\$	29.92
Wyoming	284,920	5	436.01	S	94.55		0.17	-	590.74	\$	49.23
Total or Weighted Average	171,513,489	s	245.64	\$	119.52		1.50		406.65	s	33.89
Aleska	407,089	5	382.76	5	183.54	\$ 4	6.35	2	612.65	5	51.05
Micronesia	19,188	s	558.97	S	279.40		9.74		978.10		81.51
Puerto Rico	1,227,092	5	441.18	-	2/9.40 129.15		0.82		621.15		51.76
Virgin Islands		1 *		\$		-			777.47		64.79
Au Zil i siek (Ce	60,086	5	591.92	•	143.03	5 4	2.52	<u>\$</u>	111.41	-	<u> </u>
Total as Meinhard Arrana	170 000 044		247	_	440 70		4 60		AND OF		24 07
Total or Weighted Average	173,226,944	5	247.50	- 2	119.76	3 4	1.58	•	408.85	5	34.07

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